

## ABSTRACT

A ~~procedure system, method and computer readable medium containing programming instructions for optimizing~~ command execution in a database system ~~is disclosed~~. According to one embodiment ~~of the present invention~~, the database system stores data records on data pages, and provides a ~~log sequence number~~ an identifier for each data page. The ~~log sequence number~~ identifier indicates when any of the data records contained in the data page were last modified. A data record is selected from a data page and copied to a second storage area. ~~The present invention verifies that the~~ Verification that the selected data record has not been modified since the time that it was copied to the second storage area is based upon the ~~log sequence number~~ identifier, and then ~~executes the command~~ is executed.

Advantages of the present invention include a reduction in processing time of database ~~UPDATE or DELETE operations based on scrollable cursors where there is support for optimistic concurrency.~~